CLAIMS

What is claimed is:

- 1. A method for reducing fluid loss from a wellbore servicing fluid, comprising: combining a terpolymer with the wellbore servicing fluid to reduce the fluid loss from the fluid, the terpolymer being formed from the following monomers:
- (a) from about 75% to about 95% of a first monomer by total weight of the monomers, the first monomer being generally represented by the following formula:

$$H$$
 R_1

wherein R₁ is selected from the group consisting of hydrogen and methyl groups, wherein R₂ is selected from the group consisting of sulfo, sulfophenyl, sulfoalkyl, sulfoalkyl amido, and alkali salts thereof, wherein alkylene and alkyl groups of the R₂ comprise from 1 to 4 carbon atoms, and wherein the alkali salt is a salt of a cation selected from the group consisting of sodium, potassium, and ammonium;

(b) from about 3% to about 15% of a second monomer by total weight of the monomers, the second monomer being generally represented by the following formula:

$$H$$
 R_2

wherein R₃ is selected from the group consisting of hydrogen, methyl, and ethyl groups, wherein R₄ is selected from the group consisting of N-alkyl substituted amide, N,N-dialkyl substituted amide, carboxyl alkylene amine, carboxyl alkylene methyl amine, carboxyl alkylene dimethyl

amine, pyrrolidonyl, formamide, and acetamido groups, wherein an alkyl group of the N-alkyl substituted amide is selected from the group consisting of methyl, ethyl, and propyl groups, wherein an alkyl group of the N,N-dialkyl substituted amide is selected from the group consisting of methyl and ethyl groups, and wherein an alkylene group of the R₄ includes 1 to 5 carbon atoms; and

(c) from about 3% to about 15% of a third monomer by total weight of the monomers, the third monomer being generally represented by the following formula:

$$H$$
 R_5
 R_6

wherein R_5 is selected from the group consisting of hydrogen and methyl groups, and wherein R_6 is selected from the group consisting of amide, nitrile, acetyl, and pyridinyl groups.

- 2. The method of claim 1, wherein the first monomer comprises 2-acrylamido-2-methylpropanesulfonic acid or an alkali salt thereof, the second monomer comprises N-vinyl-2-pyrrolidone, and the third monomer comprises acrylamide.
- 3. The method of claim 1, further comprising displacing the wellbore servicing fluid comprising the terpolymer into a wellbore in contact with the subterranean formation.
- 4. The method of claim 2, wherein the alkali salt of the 2-acrylamido-2-methylpropanesulfonic acid comprises sodium 2-acrylamido-2-methylpropanesulfonate.
- 5. The method of claim 1, wherein the wellbore servicing fluid comprises a drilling fluid, a work-over fluid, a fracturing fluid, a sweeping fluid, or combinations thereof.

- 6. The method of claim 1, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from about 0.05 wt.% to about 3.0 wt.% based on a total weight of the wellbore servicing fluid.
- 7. The method of claim 1, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from about 0.1 wt.% to 2.5 wt.% based on a total weight of the wellbore servicing fluid.
- 8. The method of claim 1, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from about 0.15 wt.% to 2.0 wt.% based on a total weight of the wellbore servicing fluid.
- 9. The method of claim 1, wherein the wellbore servicing fluid comprises water.
- 10. The method of claim 1, wherein the wellbore servicing fluid comprises an aqueous salt solution.
- 11. The method of claim 10, wherein the aqueous salt solution comprises NaCl, KCl, KNO₃, sea salt, Na-formate, K-formate, Cs-formate, or combinations thereof.
- 12. The method of claim 1, wherein the wellbore servicing fluid comprises clay.
- 13. The method of claim 12, wherein the clay comprises montmorillonite clay, attapulgite clay, sepiolite clay, or combinations thereof.
- 14. The method of claim 13, wherein the montmorillonite clay comprises bentonite.
- 15. The method of claim 3, wherein the wellbore has a temperature in a range of from about 50°F to about 450°F.
- 16. The method of claim 3, wherein the wellbore has a pressure of less than or equal to about 30,000 psi.

- 17. The method of claim 1, wherein the fluid loss is reduced by from about 50% to about 99% when 2.0 wt.% of the terpolymer by weight of the wellbore servicing fluid is combined with a fluid containing about 35 wt.% fresh water and about 65 wt.% K-formate brine, and wherein the terpolymer comprises about 91 wt.% Na-AMPS monomer, 5.5 wt.% NVP monomer, and 3.5 wt.% acrylamide monomer.
- 18. A wellbore servicing fluid comprising:
 - (a) a water-based fluid; and
- (b) a terpolymer for reducing fluid loss from the wellbore servicing fluid, the terpolymer being formed from the following monomers:
 - (i) from about 75 wt.% to about 95 wt.% of a first monomer generally represented by the following formula:

$$H$$
 R

wherein R₁ is selected from the group consisting of hydrogen and methyl groups, wherein R₂ is selected from the group consisting of sulfo, sulfophenyl, sulfoalkyl amido, and alkali salts thereof, wherein alkylene and alkyl groups of the R₂ comprise from 1 to 4 carbon atoms, and wherein and the alkali salt is a salt of a cation selected from the group consisting of sodium, potassium, and ammonium;

(ii) from about 3 wt.% to about 15 wt.% of a second monomer generally represented by the following formula:

$$\stackrel{\mathsf{H}}{\longrightarrow} \stackrel{\mathsf{R}_3}{\longrightarrow}$$

wherein R₃ is selected from the group consisting of hydrogen, methyl, and ethyl groups, wherein R₄ is selected from the group consisting of N-alkyl substituted amide, N,N-dialkyl substituted amide, carboxyl alkylene amine, carboxyl alkylene methyl amine, carboxyl alkylene dimethyl amine, pyrrolidonyl, formamide, and acetamido groups, wherein an alkyl group of the N-alkyl substituted amide is selected from the group consisting of methyl, ethyl, and propyl groups, wherein an alkyl group of the N,N-dialkyl substituted amide is selected from the group consisting of methyl and ethyl groups, and wherein an alkylene group of the R₄ comprises 1 to 5 carbon atoms; and

(iii) from about 3 wt.% to about 15 wt.% of a third monomer generally represented by the following formula:

$$H$$
 R_5
 R_6

wherein R_5 is selected from the group consisting of hydrogen and methyl groups, and wherein R_6 is selected from the group consisting of amide, nitrile, acetyl, and pyridinyl groups.

- 19. The wellbore servicing fluid of claim 18, wherein the first monomer comprises 2-acrylamido-2-methylpropanesulfonic acid or an alkali salt thereof, the second monomer comprises N-vinyl-2-pyrrolidone, and the third monomer comprises acrylamide.
- 20. The wellbore servicing fluid of claim 19, wherein the alkali salt of the 2-acrylamido-2-methylpropanesulfonic acid comprises sodium 2-acrylamido-2-methylpropanesulfonate.
- 21. The wellbore servicing fluid of claim 18, wherein the water-based fluid comprises a drilling fluid, a work-over fluid, a fracturing fluid, a sweeping fluid, or combinations thereof.
- 22. The wellbore servicing fluid of claim 18, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from 0.05 wt.% to about 3.0 wt.% based on a total weight of the wellbore servicing fluid.
- 23. The wellbore servicing fluid of claim 18, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from about 0.1 wt.% to 2.5 wt.% based on a total weight of the wellbore servicing fluid.
- 24. The wellbore servicing fluid of claim 18, wherein an amount of the terpolymer present in the wellbore servicing fluid is in a range of from about 0.15 wt.% to 2.0 wt.% based on a total weight of the wellbore servicing fluid.
- 25. The wellbore servicing fluid of claim 18, wherein the water-based fluid comprises water.
- 26. The wellbore servicing fluid of claim 18, wherein the water-based fluid comprises an aqueous salt solution.
- 27. The wellbore servicing fluid of claim 26, wherein the aqueous salt solution comprises NaCl, KCl, KNO₃, sea salt, Na-formate, K-formate, CS-formate, or combinations thereof.
- 28. The wellbore servicing fluid of claim 18, further comprising clay.

- 29. The wellbore servicing fluid of claim 28, wherein the clay comprises montmorillonite clay, attapulgite clay, sepiolite clay, or combinations thereof.
- 30. The wellbore servicing fluid of claim 29, wherein the montmorillonite clay comprises bentonite.
- 31. The wellbore servicing fluid of claim 18, wherein the terpolymer comprises 91 wt.% Na-AMPS monomer, 5.5 wt.% NVP monomer, and 3.5 wt.% acrylamide, wherein an amount of the terpolymer is about 2.0 wt.% by weight of the wellbore servicing fluid, wherein the water-based fluid comprises about 35 wt.% fresh water and about 65 wt.% K-formate brine, and wherein the terpolymer is capable of reducing the fluid loss by from about 50% to about 99%.